ABSTRACT OF THE DISCLOSURE

A solid state battery comprising: a substrate; a power-generating element comprising a lower current collector layer, a lower electrode layer, an electrolyte layer, an upper electrode layer and an upper current collector layer laminated in this order on the substrate; and a protective film covering at least side faces of the power-generating element, wherein at least one portion of the protective film has a stepless smooth surface, the portion extending from an upper part covering an edge of the upper current collector layer to a lower end part contacting with the substrate, and an acute angle θ formed between the surface of the substrate and a shortest oblique line is not greater than 70 degrees, the oblique line extending from a point on the edge of the upper current collector layer to a point on the outer perimeter of the interface between the lower end part and the substrate.